

What is claimed is:

1. A resonance type optical modulator comprising:
an optical path having electro-optical effect characteristics;
a modulation electrode formed along the optical path for applying
5 an electric field to the optical path;
a common electrode formed in opposition to the modulation
electrode;
a feeding line that is electromagnetically connected to the
modulation electrode; and
10 stubs connected to the feeding line;
the feeding line, stubs and common electrode being provided on one
side of a region that is divided by the modulation electrode.
- 15 2. A resonance type optical modulator according to claim 1,
wherein the feeding line includes a tapered transformer.
3. A resonance type optical modulator according to claim 1 or 2,
wherein there are an even number of stubs which are positioned
symmetrically with respect to the feeding line.
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4. A resonance type optical modulator according to claim 1,
wherein the modulation electrode and feeding line intersect at
right-angles and the stubs are positioned adjoining the feeding line and
the modulation electrode.
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5. A resonance type optical modulator according to claim 1,
wherein the common electrode formed in opposition to the modulation
electrode is open-ended at both ends.
- 30 6. A resonance type optical modulator according to claim 3,
wherein the common electrode formed in opposition to the modulation

electrode is open-ended at both ends.

7. A resonance type optical modulator according to claim 1,
wherein the common electrode formed in opposition to the modulation
5 electrode is short-ended at both ends.

8. A resonance type optical modulator according to claim 3,
wherein the common electrode formed in opposition to the modulation
electrode is short-ended at both ends.

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9. A resonance type optical modulator according to claim 1,
wherein the stubs are open stubs.

10. A resonance type optical modulator according to claim 3,
15 wherein the stubs are open stubs.

11. A resonance type optical modulator according to claim 5,
wherein the stubs are open stubs.

12. A resonance type optical modulator according to claim 6,
20 wherein the stubs are open stubs.

13. A resonance type optical modulator according to claim 7,
wherein the stubs are open stubs.

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14. A resonance type optical modulator according to claim 8,
wherein the stubs are open stubs.

15. A resonance type optical modulator according to claim 1,
30 wherein the stubs are short stubs.

16. A resonance type optical modulator according to claim 3,
wherein the stubs are short stubs.

17. A resonance type optical modulator according to claim 5,
5 wherein the stubs are short stubs.

18. A resonance type optical modulator according to claim 6,
wherein the stubs are short stubs.

10 19. A resonance type optical modulator according to claim 7,
wherein the stubs are short stubs.

20. A resonance type optical modulator according to claim 8,
wherein the stubs are short stubs.

15 21. A resonance type optical modulator comprising:
an optical path having electro-optical effect characteristics;
an open stub;
a short stub that is connected to the open stub;
20 a feeding line that is electromagnetically connected to the open stub
and the short stub; and
a common electrode;
the open stub and short stub being formed along a single optical
path to comprise a modulation electrode for applying an electric field to
25 the optical path.

22. A resonance type optical modulator comprising:
an optical path having electro-optical effect characteristics;
a first open stub;
30 a second open stub having a different length from the first open
stub that is connected to the first open stub;

a feeding line that is electromagnetically connected to the first open stub and the second open stub; and

a common electrode;

the first open stub and second open stub being formed along a
5 single optical path to comprise a modulation electrode for applying an electric field to the optical path.

23. A resonance type optical modulator comprising:

an optical path having electro-optical effect characteristics;

10 a first short stub;

a second short stub having a different length from the first short stub that is connected to the first short stub;

a feeding line that is electromagnetically connected to the first short stub and the second short stub; and

15 a common electrode;

the first short stub and second short stub being formed along a single optical path to comprise a modulation electrode for applying an electric field to the optical path.

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